STATEMENT OF CONSIDERATIONS

REQUEST BY CERAMATEC CORPORATION FOR AN ADVANCE WAIVER OF FOREIGN AND DOMESTIC PATENT RIGHTS FOR INVENTIONS DEVELOPED UNDER DOE CONTRACT NO. DE-FCO2-95CE41158, RELATING TO THE DEVELOPMENT OF AN ENERGY EFFICIENT SYSTEM FOR RECYCLING WASTE SODIUM; W(A)95-023, CH-0866.

Enclosed herewith is a petition for an advanced waiver of the governments foreign and domestic rights in inventions conceived by its employees and those of its large business subcontractors, to Ceramatec, Inc. (Ceramatec) under the subject contract. Under the program, Ceramatec is to build a novel electrochemical conversion process for recycling waste sodium sulfate to valuable chemicals by incorporating membranes to extract these chemicals.

Ceramatec has agreed to at least a 24% cost share during each phase of the contract, for a total 58% over the duration of the contract and any extensions, which is estimated to be a 48 month project, at an approximate total cost of 4.8 million dollars. It is Ceramatec's belief that a waiver of the Government's patent rights, as set forth in the following, will promote the policies and objectives of DOE and foster the commercial development of the technology. In addition, Ceramatec is seeking to elect title in all inventions developed under the program by their subcontractors. The ownership of technology developed would then be centrally located, and Ceramatec would be in a position to expedite the commercialization of the technology.

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As indicated by its sales brochures, Ceramatec since 1976 has been conducting research and development of sodium ion conducting "beta" alumina electrolytes, for sodium-sulfur batteries and the sodium heat engine. Ceramatec has also developed expertise in areas of oxygen generation and removal. As stated in section 7 of its petition, Ceramatec has expended over 2 million dollars in developing membrane materials to be used as substrates in the present research agreement. Section 15 of Ceramatec's petition add that both Ceramatec and International Paper, it's subcontractor under this agreement, have background and experience and related ongoing programs in the fields of technology covered by the scope of work.

The waiver of the Government's rights in inventions is subject to Government march-in rights, a paid-up royalty free Government license, and a U.S. preference provision comparable to that set out in 35 U.S.C. 204. Additionally, Ceramatec has agreed that products sold or used in the United States by Ceramatec and its' subsequent licenses which embody inventions under this waiver must be substantially manufactured in the United States, and further, any license or other transfer of rights in a subject invention to third parties other than licensees or affiliates of Ceramatec at the time of this agreement must be approved by DOE prior to any such transfer. As a further condition of the waiver, Ceramatec has agreed to negotiate and pass-back rights in the inventions to their subcontractors under this cost share contract, and have those subcontractors accept the same terms and conditions, march-in rights, and U.S. preference provisions.

The grant of this waiver should not result in adverse effects on competition or market concentration. Rather, the waiver should enhance competition and growth of the ceramic membrane industry in the United States, and in particular, broaden the competitive base of U.S. manufacturers. According to Ceramatec's petition, there are at least ten other manufacturers pursuing polymer-based systems, the development of an alternative technology will not inhibit commercialization of rival technologies. Moreover, waived inventions will be subject to a royalty-free license to the Government and DOE has the right to require periodic reports on the utilization or the efforts at obtaining utilization that are being made for the waived inventions. Therefore, if Ceramatec is not making reasonable efforts to utilize a waived invention, DOE can exercise its march-in right and require licensing of the invention.

In considering the foregoing, it is believed that granting the waiver will provide the petitioner with the necessary incentive to invest its resources in a manner to make the technology available to the public in the shortest practical time.

Therefore, in view of the objectives and considerations set forth in 41 CFR part 9-9.109-6, all of which have been considered, it is recommended that the requested waiver be granted.

Tyrone Dayis
Patent Attorney
Intellectual Property Law Department

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

CONCURREN	CE:	APPROVAL:	
Charles Russomano, Program Manager Office of Industrial Technology EE-222 5F-035/FORS		Paul A. Gottlieb Assistant General Counsel for Technology Transfer and Intellectual Property, HQ	
Date		Date	

(c)(3)(ix) U.S. Competitiveness

The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event that DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.

WAIVER ACTION - ABSTRACT

W(A)-95-023; CH-0866

REQUESTER	CONTRACT SCOPE OF WORK	RATIONAL FOR DECISION	<u>DISPOSITION</u>
Ceramatec Corporation	Development of a conversion process for recycling waste sodium sulfate	20% cost sharing	Recommended